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M/045/017

Norman H. Bangerter
Governor
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Director

State of Utah
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER QUALITY

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Salt Lake City, Utah
(801) 538-6146
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Reply to: State of Utah
Division of Water Quality
Department of Environmental Quality
Salt Lake City, Utah 84114-4870

February 24, 1992

Mr. Glen M. Eurick
Environmental Affairs Coordinator
Barrick Mercur Gold Mine
P.O. Box 838
Tooele, UT 84074

RE: Diesel Fuel Spill at the
Barrick Mercur Tank Farm,
Extension of Compliance Deadline

Dear Mr. Eurick:

We are in receipt of your letter of February 14, 1992, which summarized the steps Barrick intends to take to provide the Division of Water Quality with additional information concerning the referenced spill. We believe the request to extend the compliance deadlines is reasonable. We are thus extending until April 1, 1992 the compliance deadlines for the submittal of a Remedial Investigation Report and a Corrective Action Plan (see enclosure). The information you intend to gather, as listed in your February 14, 1992 letter will, in our opinion, allow you to develop the required report and plan.

If you have any questions regarding this letter or revised schedule, please contact Dennis Frederick at 538-6146.

Sincerely,

Utah Water Quality Board

Don A. Ostler, P.E.
Executive Secretary

Enclosure

DAO:DAF:rkn

cc: Lowell P. Braxton, Division of Oil, Gas & Mining (w/encl.)
Joe Trujillo, Tooele County Health Dept. (w/encl. pg. 1)
Glade Shelly, Utah County Health Dept. (w/encl. pg. 1)
Fred Nelson, Attorney General's Office (w/encl. pg. 1)

Q:BARRICK.LET
FILE:

DIVISION OF WATER QUALITY

REMEDIATION SCHEDULE FOR PETROLEUM RELEASES

Action/Report Required	Compliance Day Required	Actual Compl. Dates	Response Date
Suspected Release Reported	Day 1	October 8, 1991	October 8, 1991
Release Confirmed	Day 8	October 15, 1991	October 9, 1991
Contamination Abatement Report	45days*	December 15, 1991	Dec. 13, 1991
Site Investigation and Characterization Report	45days*	December 15, 1991	Dec. 13, 1991
Free Product Removal Report	days**		
Remedial Investigation Report	153 days*	April 1, 1992	
Corrective Action Plan	153 days*	April 1, 1992	

* From date of receipt of this schedule. Date Received October 31,1991.

** These are to be completed as directed by the Executive Secretary or this Compliance Schedule.

REMEDIATION SCHEDULE REQUIREMENTS

1. Suspected Release--This must be reported within 24 hours of determining that there may be a regulated release. It is the responsibility of the owner/operator to report this release.

2. Confirmed Release--This must be reported within 7 days of determining the suspected release. Report the confirmed release to the Project Manager and he/she will formulate a Remediation Schedule.

3. If you know that you have free product on the ground water or that ground water or surface waters have been contaminated, immediately notify the Division of Water Quality (801-538-6146). If you anticipate emitting vapors to the atmosphere, immediately notify the Division of Air Quality (801-538-6108) so that necessary permits may be obtained.

4. Contamination Abatement--These procedures and the accompanying report are due within [45] days after confirming a release. To accomplish this task, you must perform and document the following:

   a. Empty the system and remove all sources of contamination to prevent further release
   b. Visually inspect the site for evidence of contamination
   c. Continue to monitor and mitigate any fire or safety hazards in the contamination zone
   d. Remedy any hazards posed by contaminated soils and water that are excavated or exposed due to activities associated with the site investigation, abatement measures, or corrective actions
   e. Measure for the presence of a release at the most likely places and begin procedures for defining the full extent and degree of contamination. Sampling must be performed in accordance with standard soil and/or ground water sampling protocol, (use the protocol identified in State Rule R448-6.3.13).
   f. If known describe the extent of the contamination in the soil, ground water and surface waters
   g. Investigate for the presence of free product in the ground, utility lines, sewers, basements, or other pathways of contaminant migration, and begin removal of the free product as soon as feasible
   h. If sufficient information exists determine the depth to ground water beneath the site.
   i. Describe the disposition of the excavated soil. Soils that are stockpiled on-site for aeration should be

managed in accordance with the authorized procedures. If land application of contaminated soil is proposed, compliance with the Utah Ground Water Protection Regulations must be demonstrated.

j. If contaminated soils are over-excavated, confirmation soil samples must be taken in order to document that all contaminated soils have been removed

k. Submit a generalized site map showing location drawings of the facility from which the release originated, the location of the release, extent of the excavation and the location of an associated soil stockpile, locations where samples were taken and any other significant features related to the activities of this report.

If, based on the Abatement Report no significant release to ground water has occurred and if site specific information on the nature of the release indicates that contamination of ground water will not occur the responsible party may not be required to pursue further action. Further action will be required if the Executive Secretary determines that the Abatement effort was incomplete or if a significant release that has or could potentially impact ground water quality has occurred.

5. Site Investigation and Characterization--Information on the site and the nature of the release must be reported, in writing, within [45] days after confirming a release. This report must include, as appropriate, the following:

a. Nature of the release, including a description of the known or suspected release location
b. Quantity of the release and type of regulated substance released
c. Identification of surrounding populations potentially effected by the release
d. Local land use and population density
e. Approximate locations and uses of wells in area where the release occurred
f. Distance to surface water
g. Local ground water quality
h. Subsurface soil conditions and native soil types
i. General location map, at an appropriate scale, showing the following features;

   i. Site location
   ii. Streets, labeled
   iii. Location of wells potentially affected by the release
   iv. Regional and local direction of ground water flow.

j. Detailed site map, at an appropriate scale, showing the following properly labeled features;

   i. Adjacent land use surrounding the facility that could affect or be affected by the release (include irrigation canals, drainage channels, and other relevant features)
   ii. Fences and property boundaries
   iii. Type of on-site ground cover, such as asphalt, concrete, grass
   iv. Detailed location drawings of the facility from which the spill or leak originated.
   v. Extent of any excavations and the location of the associated soil stockpile
   vi. Location(s) of the release
   vii. Locations of all soil and ground water samples collected during any phase of the investigation; include soil boring and monitor well locations, if applicable. All sample identification numbers shown on the site map should be consistent with the identification numbers used on the Chain-of-Custody forms and the laboratory analysis reports.
   viii. Location of any significant subsurface features and utility conduits that could provide a pathway for the migration of contaminants, such as sewer lines, utility lines, production wells, dry wells, septic systems, and trenches

k. Describe the methods and techniques used for sample collection, and applicable QA/QC measures.

i. If soil borings are emplaced, submit detailed geologic logs of those borings. Show sample collection points in the borings and any field vapor measurements obtained while advancing the boring
ii. If ground water monitor wells are emplaced, submit detailed geologic logs. Describe sample collection methods and devices used for obtaining ground water samples. Include the number of casing volumes purged prior to sample collection
iii. Include Chain-of-Custody documentation for all samples collected
iv. The analytical detection levels should be sufficiently low in order to detect constituents at or below their applicable maximum contaminant levels (MCLs) or reference levels.

l. Results of the sampling performed in the site investigation; include the laboratory analytical results and Chain-of-Custody documentation
m. Results of the check for free product
n. Conclusions and recommendations concerning the site.

If after review of the Site Investigation and Characterization Report the Executive Secretary determines that there is actual or potential contamination of the ground water and/or the threat to human health and the environment is significant then any or all of the following actions may be required by the Executive Secretary. The generalized descriptions of the actions that may be ordered by the Executive Secretary are given below only to provide some basic direction and explanation of what is required. The descriptions provided below may or may not be directly applicable at your site. Remedial Investigations and Corrective Actions require the use of scientifically sound informational gathering techniques and the application of professional judgement. Such knowledge and practice must be applied on a case-by-case basis.

6. Free Product Removal--Prior to a Corrective Action Plan free product, if present, must be removed to the maximum possible extent. Free product removal is conducted to minimize the spread of contamination. The design of removal plans must address, at a minimum, the abatement of free product migration.

The Free Product Removal Report must contain, but not be limited to, the following minimum information:

a. Identity of person(s) removing the free product
b. Estimate of the quantity, type and thickness of product observed or measured in wells, boreholes or excavations
c. Type of free product recovery system to be used
d. Disposition of the recovered free product and water discharges. Discharges shall not be disposed of in such a manner that they are placed in direct contact with the environment
e. Effluent (water) quality from the recovery system
f. Steps taken to obtain necessary permits (water discharge, air emission, construction, etc.)
g. Method and location of product disposal.

7. Remedial Investigation (RI)--In order to determine the full extent and degree of contamination an investigation for soil and ground water may be required for the release site and any area possibly affected by the release. Such an investigation would address the potential effects of contaminated soil or ground water on nearby surface or ground water resources. A report on this investigation must be submitted within the time frame specified by the Executive Secretary.

8. Corrective Action Plan (CAP)--The Executive Secretary may require that you submit a CAP for responding to contaminated soils and ground water at any time after submittal of any information concerning the site. The CAP must provide for adequate protection of human health and the environment as determined by the Executive Secretary. The Executive Secretary must approve the plan which considers and addresses, but is not limited to, the following

factors:

a. Physical and chemical characteristics of the regulated substance released, including it's toxicity, persistence, and potential for migration
b. Hydrogeologic characteristics in the immediate vicinity and area surrounding the facility including the following information;

   i. The known or recorded depth to ground water beneath the site using information obtained from the Utah Division of Water Rights, U.S. Geological Survey, or other relevant sources
   ii. Direction and magnitude of ground water flow
   iii. Lithology of the subsurface as determined through excavations, soil borings, or other sources.
   iv. Quality of ground water upgradient from and unaffected by the discharge, including analytical data sufficient to determine ground water class and protection levels and background concentrations of parameters characteristic of the discharged substance.

c. Proximity of nearby surface and ground water, quality of those waters, and current and future uses of the water resource
d. The potential effects of residual contamination on nearby surface and ground waters.
e. An exposure assessment
f. Any information assembled in compliance with these cleanup requirements
g. A Contingency Response Plan in the event that corrective action is not effective or if further contamination occurs
h. A Post-Remedial Verification Completion Report for the purpose of verifying and documenting the effectiveness of corrective action.